

In the Claims:

Please amend the claims as follows:

1. (Currently Amended) A process for increasing ~~the~~ a rate of a biocatalysis reaction[[s]], which comprises:

applying a direct current (DC) electric field to a reaction mixture, wherein the reaction mixture and ~~the~~ electrodes used to apply said electric field are separated such that the reaction mixture does not come into contact with said electrodes.

2. (Original) A process according to claim 1, wherein said electric field is applied for a sufficient time to stimulate the biocatalysis reaction in the reaction mixture.

3. (Currently Amended) A process according to claim ~~1 or 2~~, wherein said reaction mixture and said electrodes are separated by a separation membrane.

4. (Original) A process according to claim 3, wherein said separation membrane is any of an ion exchange membrane or a microporous membrane.

5. (Original) A process according to claim 4, wherein said separation membrane is a bipolar ion exchange membrane.

6. (Currently Amended) A process according to claim 1 ~~any of claims 1 to 4~~, wherein said electrodes form part of an electrochemical reactor.

7. (Currently Amended) A process according to claim 6, wherein said electrochemical reactor forms part of an electrodialysis stack, wherein charged organic products in the biocatalysis reaction mixture ~~medium~~ can be removed by electrodialysis.

8. (Currently Amended) A process according to claim 1 ~~any of claims 1 to 7~~, wherein said reaction mixture ~~medium~~ is contained between a bipolar membrane on ~~the~~ a cathode-facing side and an anion selective membrane on ~~the~~ an anode-facing side of

said reaction mixture medium.

9. (Currently Amended) A process according to claim 1 ~~any of claims 1 to 8~~, wherein the reaction mixture medium comprises a cationic buffer system, with the an organic product forming the an anionic component.

10. (Currently Amended) A process according to claim 9, wherein the DC electric field ~~current~~ applied is adjusted to control the pH of the reaction mixture.

11. (Currently Amended) A process according to claim 10, wherein the adjustment to the DC electric field ~~current~~ is automatically controlled under the control of a computer program.

12. (Currently Amended) A process according to claim 7 ~~any of claims 7 to 11~~, wherein the biocatalysis reaction and the electrodialysis ~~stages~~ are operated in separate, but linked, reactors, where the biocatalysis reaction mixture medium containing active biomass can be recirculated continuously to the ~~electrodialysis~~ electrochemical reactor.

13. (Currently Amended) A process according to ~~any preceding~~ claim 1, wherein the biocatalysis reaction ~~comprises any of~~ is selected from a single enzyme biotransformation reaction, a fermentation process ~~or~~ and a reaction ~~catalysed~~ catalyzed by an isolated enzyme system.

14. (Currently Amended) A process according to ~~any preceding~~ claim 1, wherein the reaction mixture comprises any of growing or resting microbial cultures.

15. (Currently Amended) A process according to claim 14, wherein said microbial ~~mixtures~~ cultures ~~comprise immobilised~~ immobilized cultures of yeast, bacteria or fungi.

16. (Currently Amended) A process according to claim 15, wherein said cultures are

~~immobilised~~ immobilized on the surfaces or in the pores of beads.

17. (New) A process according to claim 8, wherein the reaction mixture comprises a cationic buffer system, with an organic product forming an anionic component.

18. (New) A process according to claim 8, wherein the reaction mixture comprises immobilized microbial cultures of yeast, bacteria or fungi.

19. (New) A process according to claim 8, wherein the reaction mixture comprises immobilized microbial cultures on surfaces or in pores of beads.

20. (New) A process according to claim 9, wherein the reaction mixture comprises immobilized microbial cultures of yeast, bacteria or fungi on surfaces or in pores of beads.